

FIG. 1

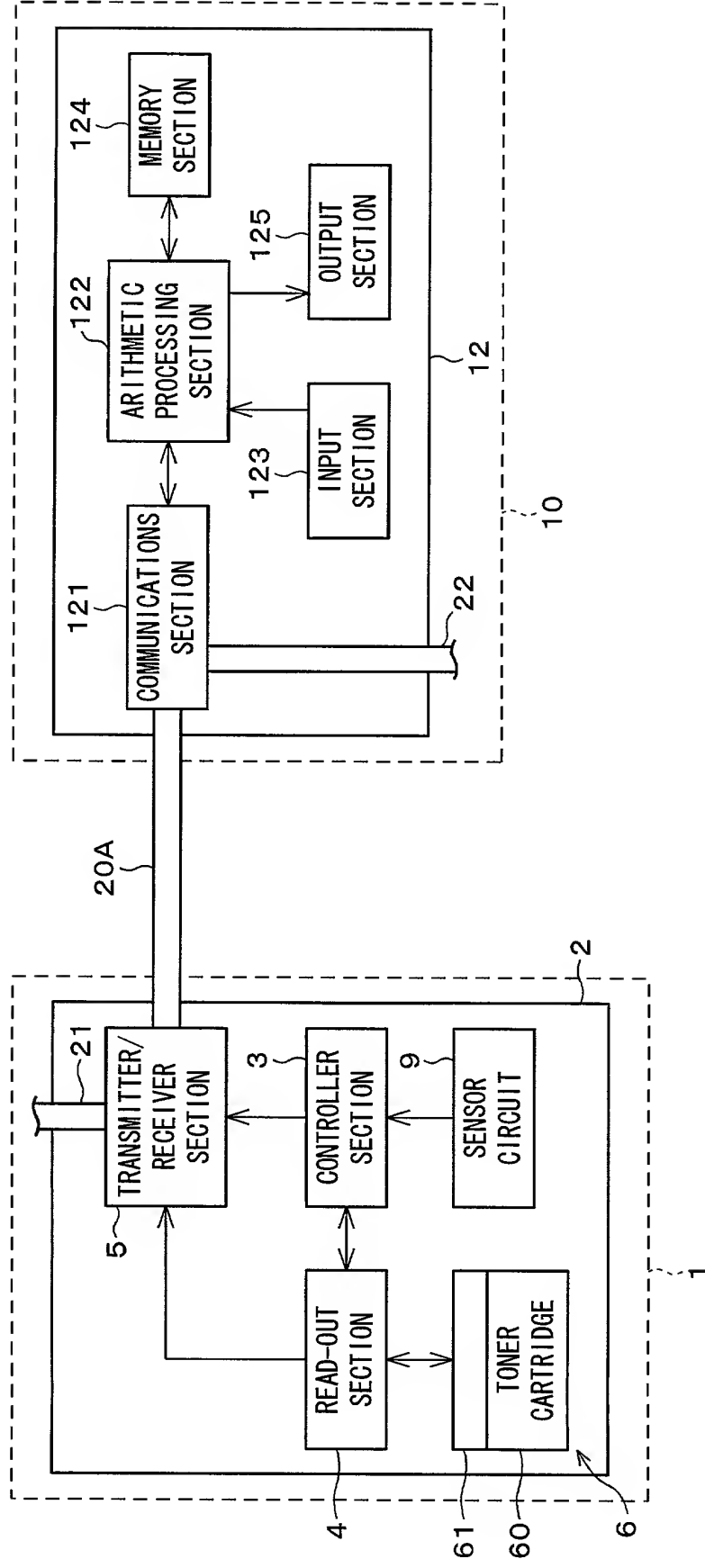


FIG. 2

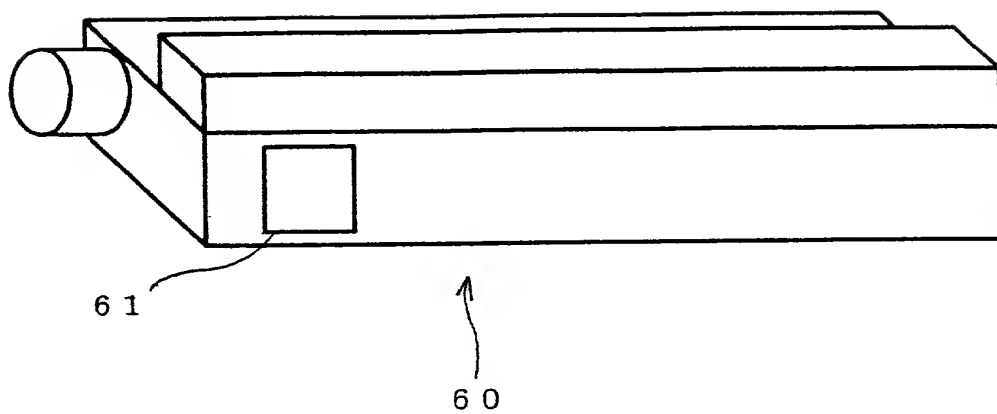


FIG. 3

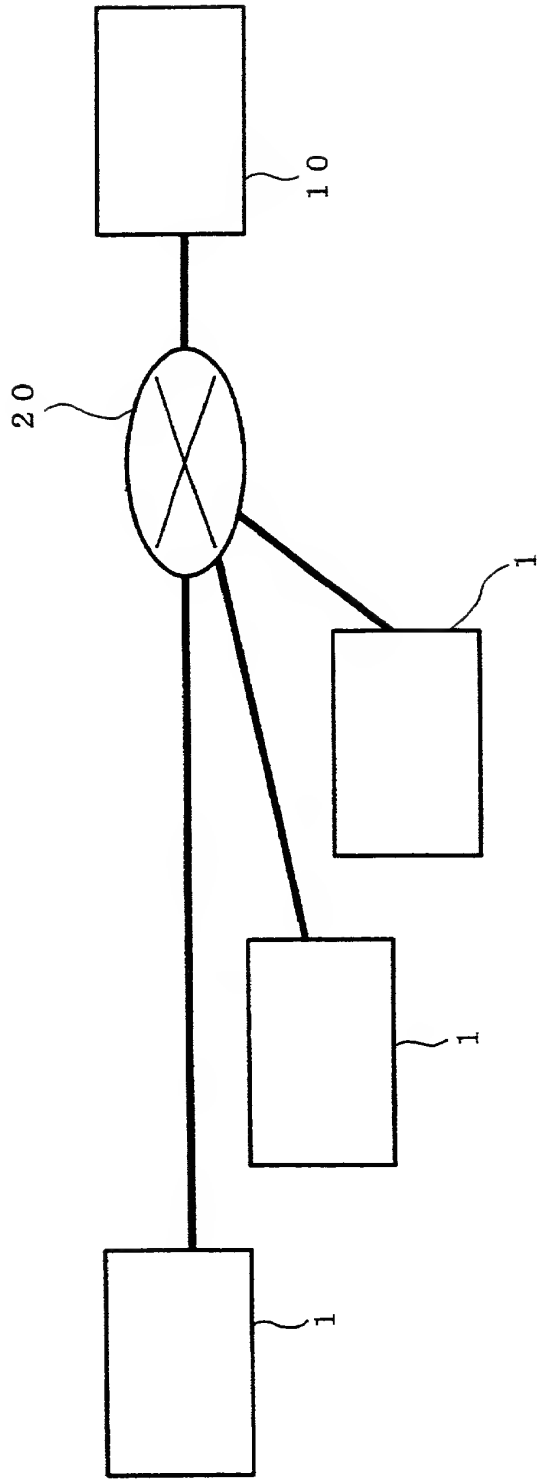


FIG. 4

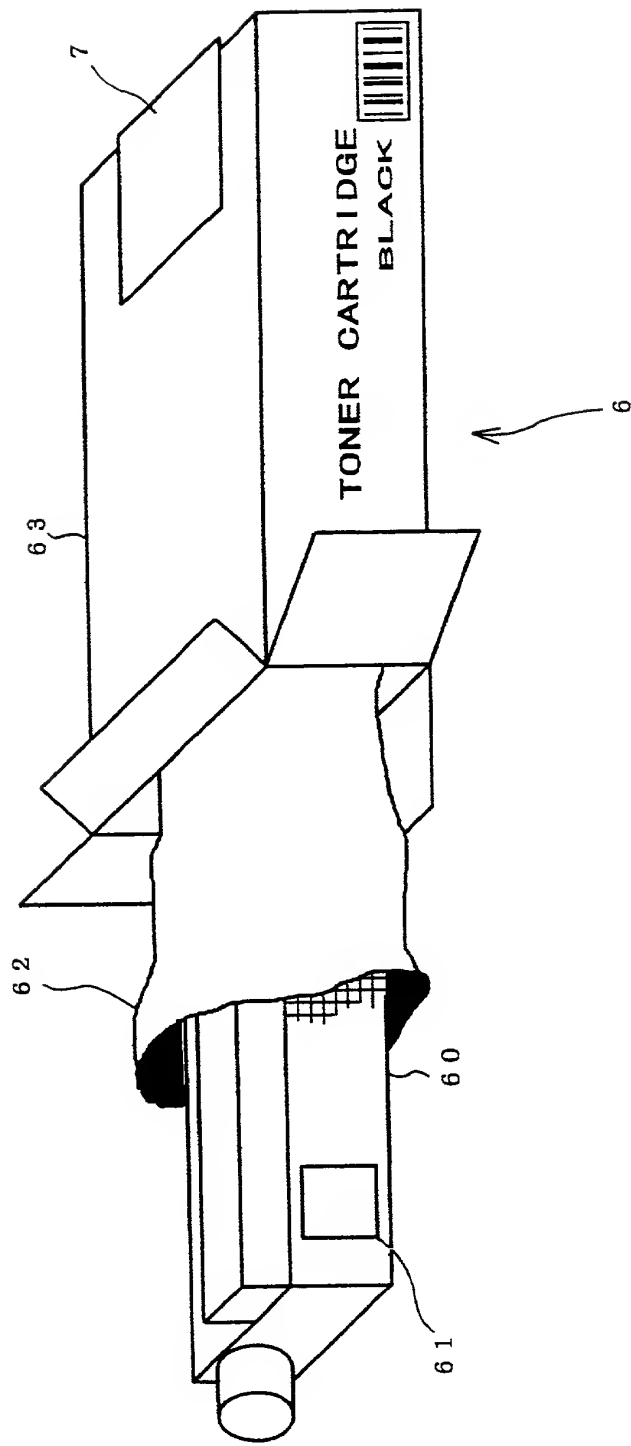


FIG. 5 (a)

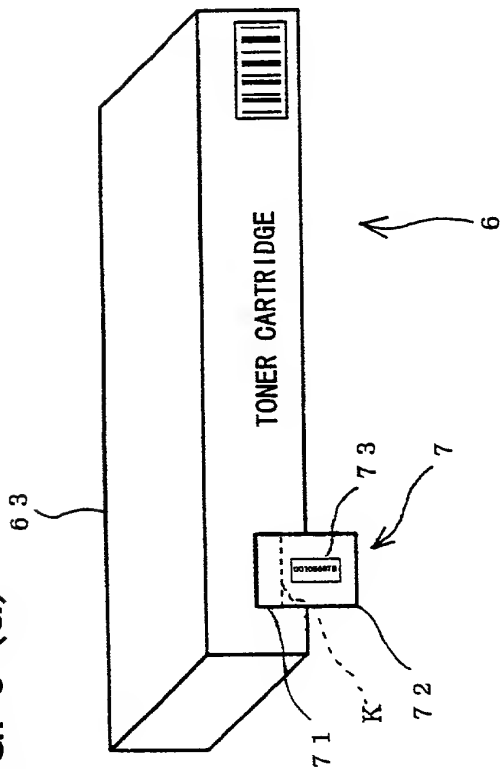


FIG. 5 (b)

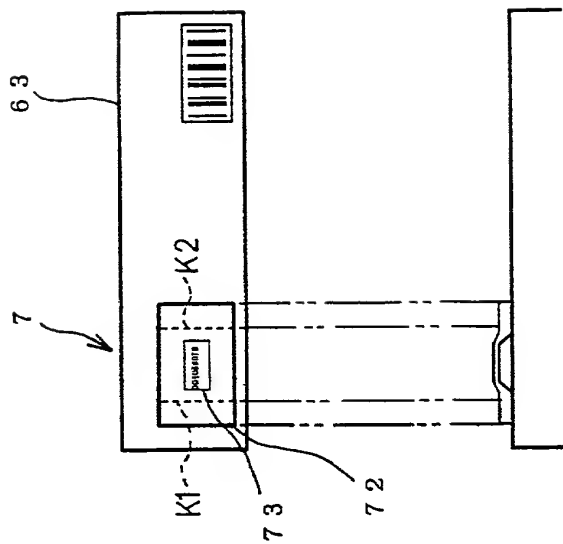


FIG. 5 (c)

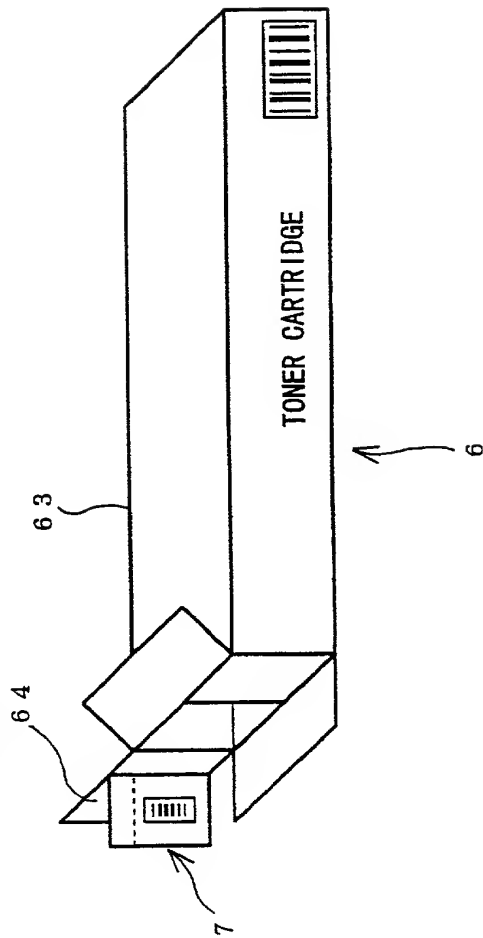


FIG. 6 (a)

PRODUCT-IN-CIRCULATION DATA TABLE [1]

CURRENT DATA AND TIME Tp: 10/28/2000

UNIQUE DATA	REMARKS	THE NUMBER OF TIMES COLLECTED N	ACCOUNTING
0000 0000 0000 0101 0000	BLACK TONER CARTRIDGE FOR AR-2000	3	CHARGED
0000 0000 0000 0101 0001		1	CHARGED
0000 0000 0000 0101 0010		2	UNCHARGED
...	
0100 0000 0000 0000 0100	YELLOW TONER CARTRIDGE FOR AR-2000	0	CHARGED
0100 0000 0000 0000 0101		0	UNCHARGED
...	
0100 0000 0000 0000 1100	MAGENTA TONER CARTRIDGE FOR AR-2000	0	CHARGED
0100 0000 0000 0000 1101		0	UNCHARGED
...	
1100 0000 0000 0000 0111	CYAN TONER CARTRIDGE FOR AR-2000	0	CHARGED
1100 0000 0000 0000 1000		0	UNCHARGED
...

FIG. 6 (b)

PRODUCT-IN-CIRCULATION DATA TABLE [1]

CURRENT TADA AND TIME Tp: 10/28/2000

UNIQUE DATA	REMARKS	THE NUMBER OF TIMES COLLECTED N	ACCOUNTING
0000 0000 0000 0101 0000	BLACK TONER CARTRIDGE FOR AR-2000	3	CHARGED
0000 0000 0000 0101 0001		1	CHARGED
0000 0000 0000 0101 0010		2	UNCHARGED
...	
0100 0000 0000 0000 0100	YELLOW TONER CARTRIDGE FOR AR-2000	0	CHARGED
0100 0000 0000 0000 0101		1	UNCHARGED
...	
0100 0000 0000 0000 1100	MAGENTA TONER CARTRIDGE FOR AR-2000	0	CHARGED
0100 0000 0000 0000 1101		1	UNCHARGED
...	
1100 0000 0000 0000 0111	CYAN TONER CARTRIDGE FOR AR-2000	0	CHARGED
1100 0000 0000 0000 1000		1	UNCHARGED
...

FIG. 6 (c)

PRODUCT-IN-CIRCULATION DATA TABLE [2]

CURRENT TADA AND TIME Tp: 10/28/2000

UNIQUE DATA	REMARKS	THE NUMBER OF TIMES COLLECTED N	ACCOUNTING
...
0010 0000 0000 0000 0000	APPLICATION SOFTWARE "DATA SEARCH" Ver. 1.0	0	CHARGED
0010 0000 0000 0000 0001		2	UNCHARGED
0010 0000 0000 0000 0010		2	UNCHARGED
...	
0010 0000 0000 1000 0000	APPLICATION SOFTWARE "DATA SEARCH" Ver. 2.0	0	CHARGED
0010 0000 0000 1000 0001		1	CHARGED
0010 0000 0000 1000 0010		1	UNCHARGED
...	
...
0010 0001 0000 0000 0000	APPLICATION SOFTWARE "TRANSLATION ASSISTANT"	0	CHARGED
0010 0001 0000 0000 0001		0	CHARGED
0010 0001 0000 0000 0010		1	UNCHARGED
...	

FIG. 7 (a)

CONTRACT SIGNER TABLE[1]

ID NUMBER	NAME OF CONTRACT SIGNER	STREET ADDRESS	EMAIL ADDRESS	TELEPHON E NO.	DATE OF CONTRACT SIGNED	METHOD OF PAYMENT	...
000001	A CO., LTD.						
000002	B INC.	GENERAL AFFAIRS DEPARTMENT					
000003	C CO., LTD.	ABC DIVISION					
000004	C CO., LTD.	XYZ DIVISION					
000005							
...							

FIG. 7 (b)

CONTRACT SIGNER TABLE[2]

ID NUMBER	CONTRACT MODEL1	CONTRACT MODEL2	CONTRACT MODEL3	...
000001	AR-2000	NO CONTRACT	NO CONTRACT	
000002	AR-2000	NO CONTRACT	NO CONTRACT	
000003	AR-2000	AR-2001	NO CONTRACT	
000004	AR-2000	NO CONTRACT	NO CONTRACT	
000005				
...				

FIG. 9 (a) INSTALLED CARTRIDGE DATA

MACHINE MODEL		AR-2000		LIBRE	
CONTRACT SIGNER ID		000125			

CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				THE NUMBER OF TIMES COLLECTED N	CORRESPONDING SPARE CARTRIDGE No.
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
BLACK	N/A	N/A	N/A	N/A	N/A	N/A	N/A
YELLOW	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MAGENTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CYAN	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FIG. 9 (b) SPARE CARTRIDGE DATA

MACHINE MODEL		AR-2000		LIBRE	
CONTRACT SIGNER ID		000125			

DATE

03/21/2000/15:58

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CANCEL

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	THE NUMBER OF TIMES COLLECTED N
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
1	3/22/2000	—	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	NEW (SPARE)	3
2	3/22/2000	—	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	NEW (SPARE)	0
3	3/22/2000	—	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	NEW (SPARE)	0
4	3/22/2000	—	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	NEW (SPARE)	0
5	3/22/2000	—	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	NEW (SPARE)	1
6	3/22/2000	—	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	NEW (SPARE)	0
7	3/22/2000	—	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	NEW (SPARE)	0
8	3/22/2000	—	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	NEW (SPARE)	0
9	.							
10	.							

FIG. 10 (a) INSTALLED CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE
 CONTRACT SIGNER ID 000125

CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				THE NUMBER OF TIMES COLLECTED N	CORRESPONDING SPARE CARTRIDGE No.
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
BLACK	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER (00)	AR-2000	0000 0000 0101 0000	3	1 (No. 1)
YELLOW	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER (01)	AR-2000	0000 0000 0000 0100	0	1 (No. 2)
MAGENTA	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER (10)	AR-2000	0000 0000 0000 1100	0	1 (No. 3)
CYAN	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER (11)	AR-2000	0000 0000 0000 0111	0	1 (No. 4)
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FIG. 10 (b) SPARE CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE
 CONTRACT SIGNER ID 000125

DATE 03/22/2000/16:45

CONFIRM REGISTER CANCEL

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	THE NUMBER OF TIMES COLLECTED N
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
1	3/22/2000	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER (00)	AR-2000	0000 0000 0101 0000	IN USE	3
2	3/22/2000	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER (01)	AR-2000	0000 0000 0000 0100	IN USE	0
3	3/22/2000	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER (10)	AR-2000	0000 0000 0000 1100	IN USE	0
4	3/22/2000	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER (11)	AR-2000	0000 0000 0000 0111	IN USE	0
5	3/22/2000	—	0000 0000 0000 0101 0001	BLACK TONER (00)	AR-2000	0000 0000 0101 0001	NEW (SPARE)	1
6	3/22/2000	—	0100 0000 0000 0000 0101	YELLOW TONER (01)	AR-2000	0000 0000 0000 0101	NEW (SPARE)	0
7	3/22/2000	—	1000 0000 0000 0000 1101	MAGENTA TONER (10)	AR-2000	0000 0000 0000 1101	NEW (SPARE)	0
8	3/22/2000	—	1100 0000 0000 0000 1000	CYAN TONER (11)	AR-2000	0000 0000 0000 1000	NEW (SPARE)	0
9	.							
10	.							

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FIG. 11 (a) INSTALLED CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE

CONTRACT SIGNER ID 000125

CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				THE NUMBER OF TIMES COLLECTED N	CORRESPONDING SPARE CARTRIDGE No.
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
BLACK	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	1	0 (No. 5)
YELLOW	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	0	1 (No. 2)
MAGENTA	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	0	1 (No. 3)
CYAN	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	0	1 (No. 4)
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FIG. 11 (b) SPARE CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE

CONTRACT SIGNER ID 000125

DATE 06/12/2000/10:56

CONFIRM REGISTER CANCEL

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	THE NUMBER OF TIMES COLLECTED N
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
1	3/22/2000	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	USED	3
2	3/22/2000	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	IN USE	0
3	3/22/2000	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	IN USE	0
4	3/22/2000	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	IN USE	0
5	3/22/2000	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	IN USE	1
6	3/22/2000	—	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	NEW (SPARE)	0
7	3/22/2000	—	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	NEW (SPARE)	0
8	3/22/2000	—	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	NEW (SPARE)	0
9	.							
10	.							

FIG. 12 (a) INSTALLED CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE
CONTRACT SIGNER ID 000125

CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				THE NUMBER OF TIMES COLLECTED N	CORRESPONDING SPARE CARTRIDGE No.
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
BLACK	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	1	1 (No. 5)
YELLOW	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	0	1 (No. 2)
MAGENTA	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	0	1 (No. 3)
CYAN	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	0	1 (No. 4)
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FIG. 12 (b) SPARE CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE
CONTRACT SIGNER ID 000125

DATE 06/20/2000/10:56

CONFIRM REGISTER CANCEL

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	THE NUMBER OF TIMES COLLECTED N
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
1	3/22/2000	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	USED	3
2	3/22/2000	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	IN USE	0
3	3/22/2000	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	IN USE	0
4	3/22/2000	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	IN USE	0
5	3/22/2000	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	IN USE	1
6	3/22/2000	COLLECTED	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	COLLECTED	—
7	3/22/2000	COLLECTED	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	COLLECTED	—
8	3/22/2000	COLLECTED	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	COLLECTED	—
9	6/20/2000	—	0000 0000 0000 0101 0010	BLACK TONER(00)	AR-2000	0000 0000 0101 0010	NEW (SPARE)	2
10								

FIG.13

ACCOUNTING LIST[1] (PERIOD: MARCH 16, 2000 – APRIL 15, 2000)

CONTRACT SIGNER ID:000125
CONTRACT MODEL:AR-2000 LIBRE

No.	PRODUCT	ACCOUNT FACTOR	DATE OF INSTALLATION	QUANTITY	UNIT PRICE	SUBTOTAL
1	BLACK TONER CARTRIDGE	k3	3/22/2000	1	Pb	Pb * k3
2	YELLOW TONER CARTRIDGE	1	3/22/2000	1	Py	Py
3	MAGENTA TONER CARTRIDGE	1	3/22/2000	1	Pm	Pm
4	CYAN TONER CARTRIDGE	1	3/22/2000	1	Pc	Pc
5						
TOTAL						△△△△. △

ACCOUNTING LIST[2] (PERIOD: APRIL 16, 2000 –MAY 15, 2000)

CONTRACT SIGNER ID:000125
CONTRACT MODEL:AR-2000 LIBRE

No.	PRODUCT	ACCOUNT FACTOR	DATE OF INSTALLATION	QUANTITY	UNIT PRICE	SUBTOTAL
1	NO DATA					0
2						
3						
4						
5						
TOTAL						0

ACCOUNTING LIST[3] (PERIOD:MAY 16, 2000 –JUNE 15, 2000)

CONTRACT SIGNER ID:000125
CONTRACT MODEL:AR-2000 LIBRE

No.	PRODUCT	ACCOUNT FACTOR	DATE OF INSTALLATION	QUANTITY	UNIT PRICE	SUBTOTAL
1	BLACK TONER CARTRIDGE	k1	6/12/2000	1	Pb	Pb * k1
2						
3						
4						
5						
TOTAL						Pb * k1

FIG. 14

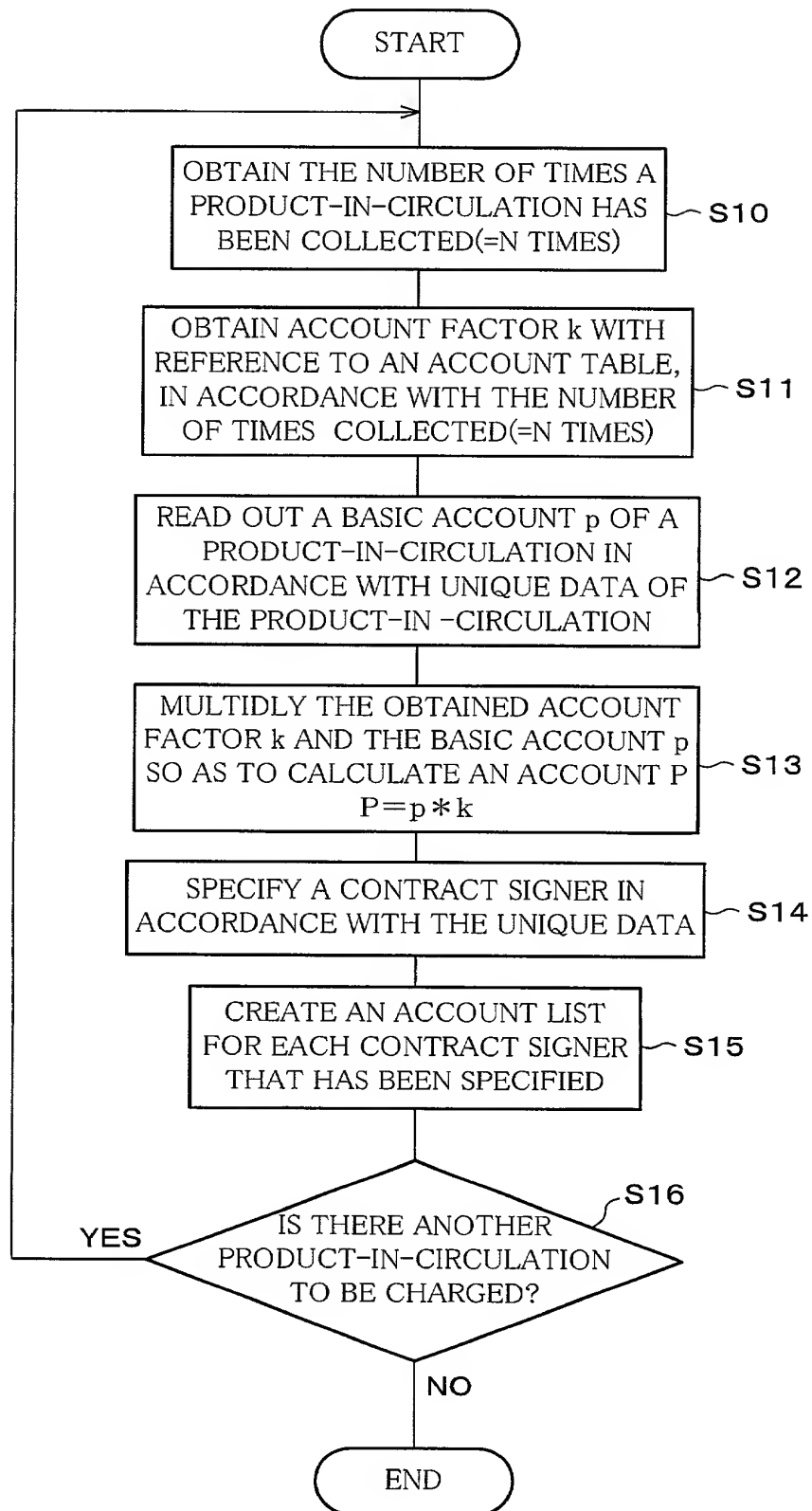


FIG. 15

ACCOUNT FACTOR TABLE [1]

NUMBER OF TIMES COLLECTED(=N TIMES)	ACCOUNT FACTOR k
N 0 : 0	k 0 = 1
N 1 : 1	k 1
N 2 : 2	k 2
N 3 : 3	k 3
N 4 : 4	k 4

However, $k_0 > k_1 > k_2 \dots$

FIG.16 (a)

BASIC ACCOUNT TABLE [1]

UNIQUE DATA	REMARKS	BASIC ACCOUNT	p
0000 XXXX XXXX XXXX	BLACK TONER CARTRIDGE FOR AR-2000	p 1	
...	
0100 XXXX XXXX XXXX	YELLOW TONER CARTRIDGE FOR AR-2000	p 2	
...	
1000 XXXX XXXX XXXX	MAGENTA TONER CARTRIDGE FOR AR-2000	p 3	
...	
1100 XXXX XXXX XXXX	CYAN TONER CARTRIDGE FOR AR-2000	p 4	
...	

XXXX IS ARBITRARY 0 or 1

FIG.16 (b)

BASIC ACCOUNT TABLE [2]

UNIQUE DATA	REMARKS	BASIC ACCOUNT	p'
0010 0000 XXXX XXXX XXXX	APPLICATION SOFTWARE "DATA SEARCH"	p 1'	
...	
0010 0001 XXXX XXXX XXXX	APPLICATION SOFTWARE "TRANSLATION ASSISTANT"	p 2'	
...	
1100 XXXX XXXX XXXX XXXX	UNRECORDED VHS TAPE	p 3'	
...	
1101 XXXX XXXX XXXX XXXX	UNRECORDED DV TAPE	p 4'	
...	
0100 0000 XXXX XXXX XXXX	DVD VIDEO "XXX"	p 5'	
...	

XXXX IS ARBITRARY 0 or 1

UNIQUE DATA-CONTRACT SIGNER ID TABLE

FIG. 17 (a)

CURRENT DATA AND TIME : 3/22/2000

UNIQUE DATA	REMARKS	CONTRACT SIGNER ID
0000 0000 0000 0000 0000	BLACK TONER CARTRIDGE FOR AR-2000	001604
0000 0000 0000 0000 0001		001604
...		...
0000 0000 0000 0101 0000		000125
0000 0000 0000 0101 0001		000125
0000 0000 0000 0101 0010		000209
...		...
0100 0000 0000 0000 0000	YELLOW TONER CARTRIDGE FOR AR-2000	003161
...		...
0100 0000 0000 0000 0100		000125
0100 0000 0000 0000 0101		000125
...		...
1000 0000 0000 0000 0000	MAGENTA TONER CARTRIDGE FOR AR-2000	03161
...		...
1000 0000 0000 0000 1100		000125
1000 0000 0000 0000 1101		000125
...		...
1100 0000 0000 0000 0000	CYAN TONER CARTRIDGE FOR AR-2000	03161
...		...
1100 0000 0000 0000 0111		000125
1100 0000 0000 0000 1000		000125
...		...

FIG. 17 (b)

CURRENT DATA AND TIME : 6/20/2000

UNIQUE DATA	REMARKS	CONTRACT SIGNER ID
0000 0000 0000 0000 0000	BLACK TONER CARTRIDGE FOR AR-2000	001604
0000 0000 0000 0000 0001		—
...		...
0000 0000 0000 0101 0000		000125
0000 0000 0000 0101 0001		000125
0000 0000 0000 0101 0010		000209
...		...
0100 0000 0000 0000 0000	YELLOW TONER CARTRIDGE FOR AR-2000	003161
...		...
0100 0000 0000 0000 0100		000125
0100 0000 0000 0000 0101		102611
...		...
1000 0000 0000 0000 0000	MAGENTA TONER CARTRIDGE FOR AR-2000	03161
...		...
1000 0000 0000 0000 1100		000125
1000 0000 0000 0000 1101		102611
1100 0000 0000 0000 0000		03161
...	CYAN TONER CARTRIDGE FOR AR-2000	...
1100 0000 0000 0000 0111		000125
1100 0000 0000 0000 1000		102611
...		...

FIG. 18

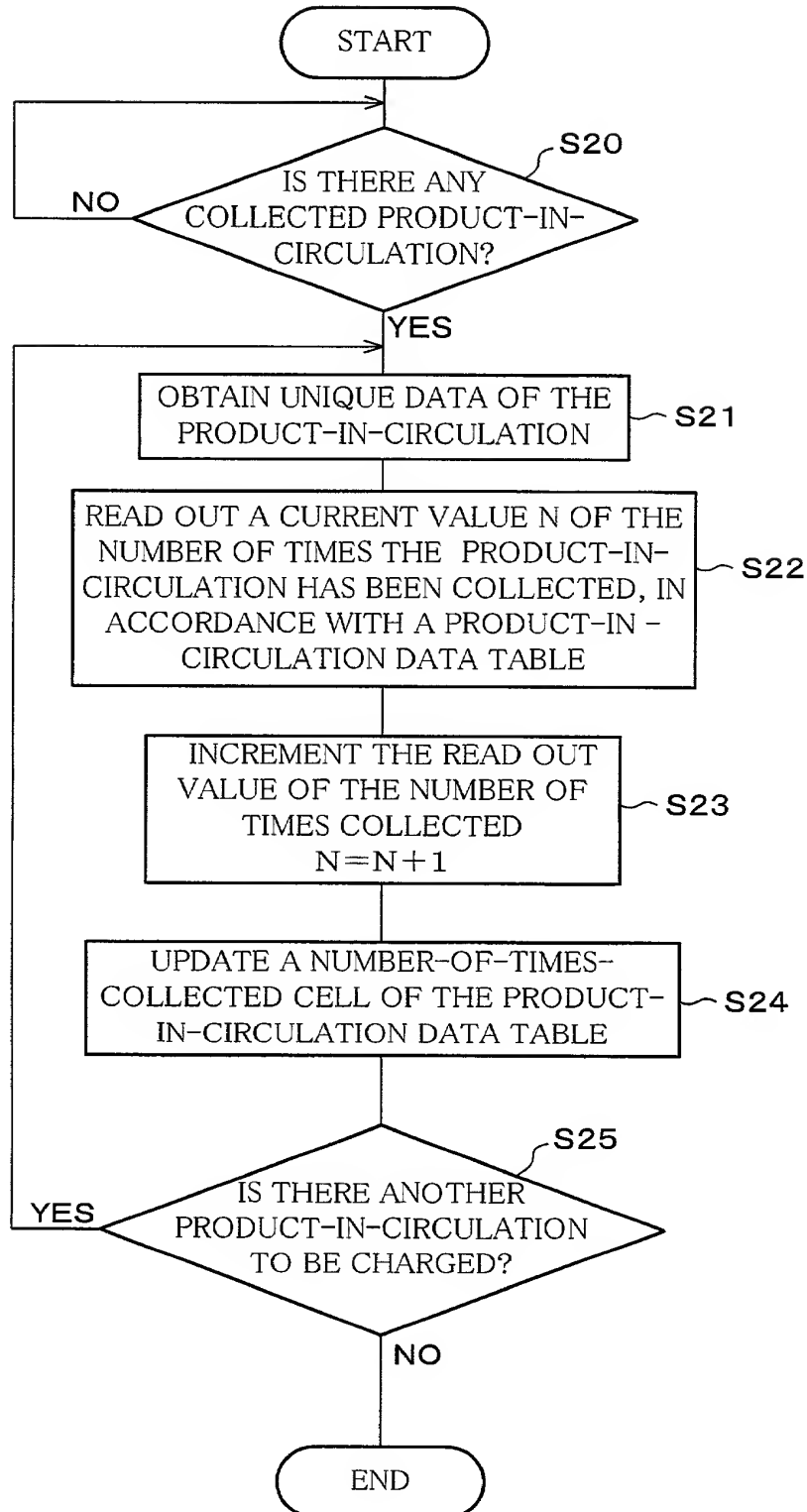


FIG. 19

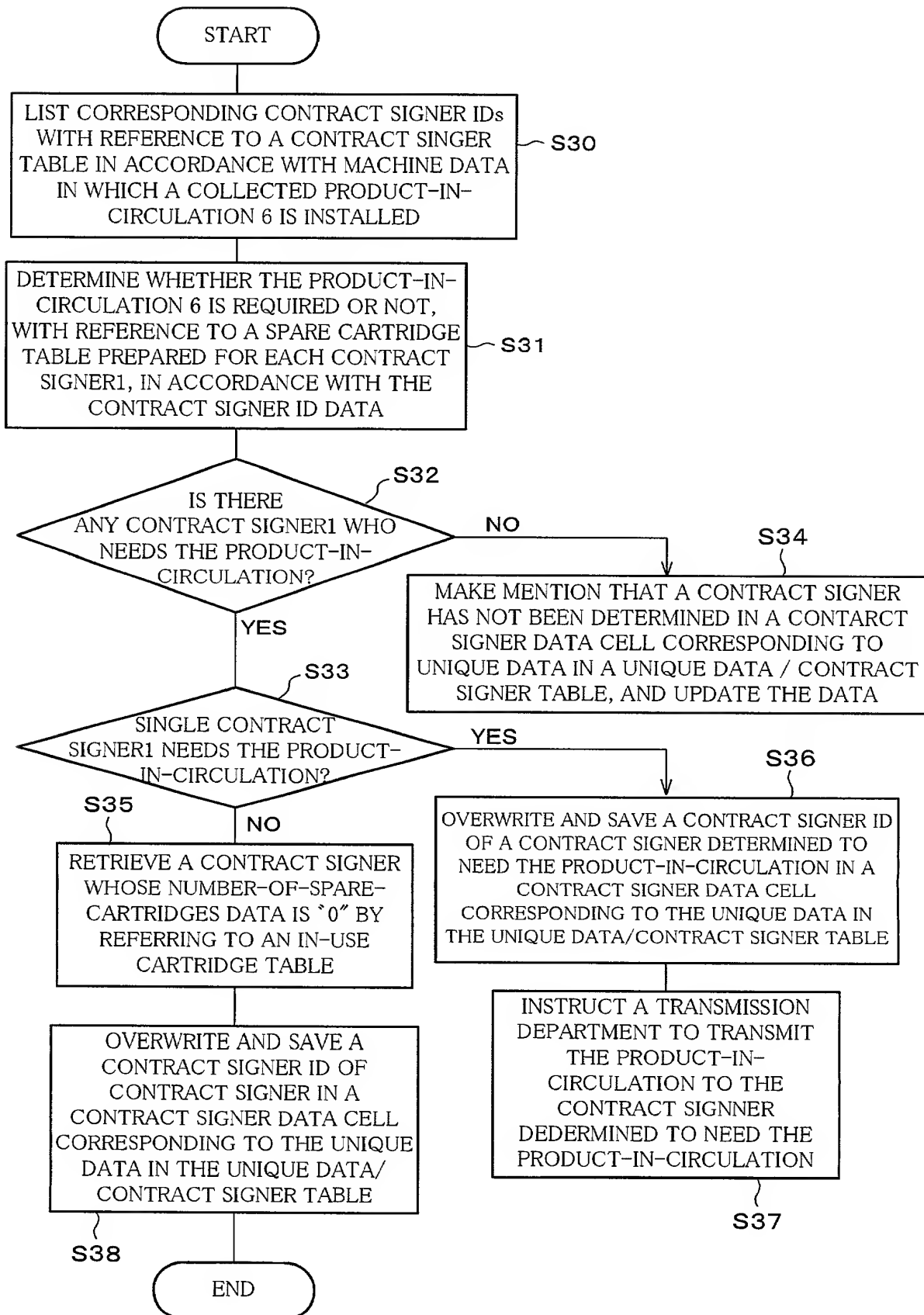


FIG. 20

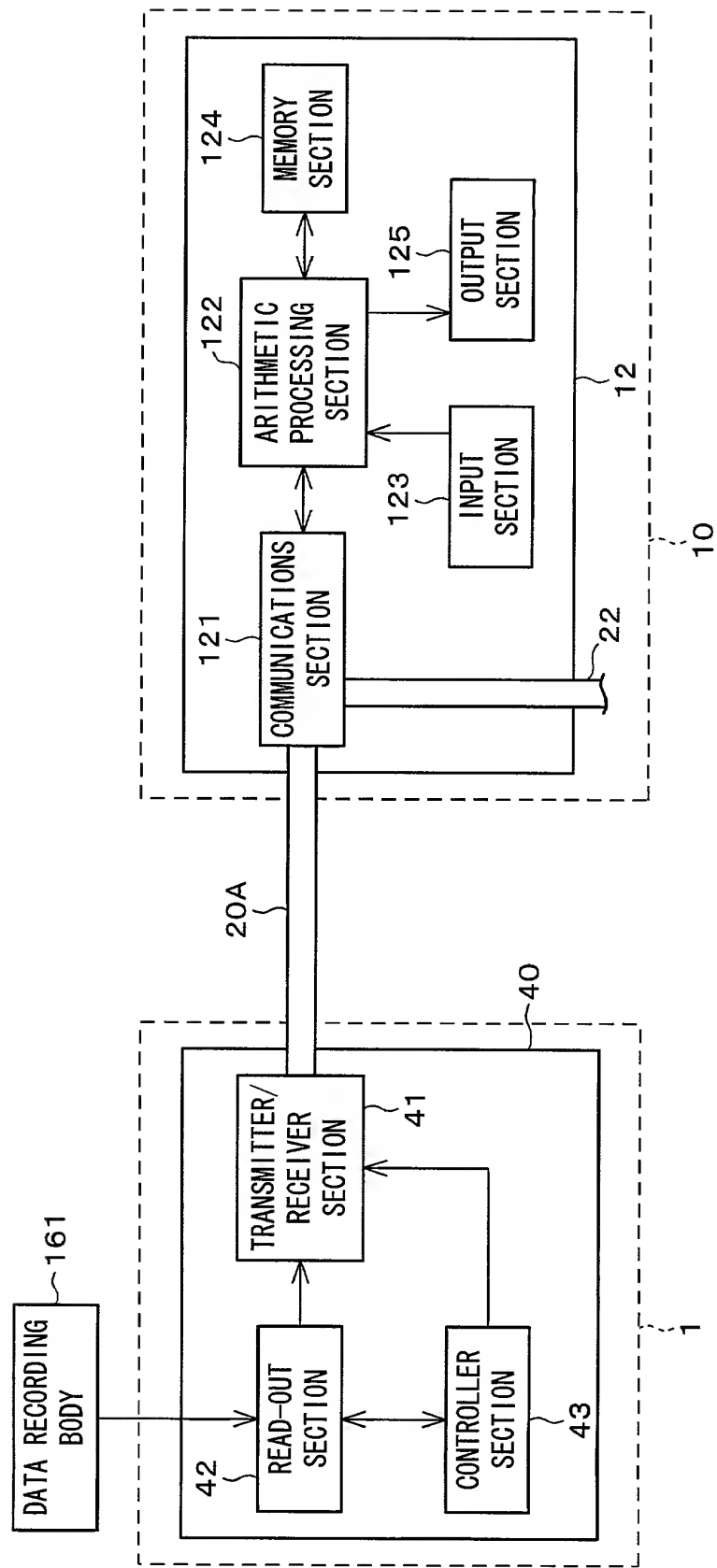


FIG. 21 (a)

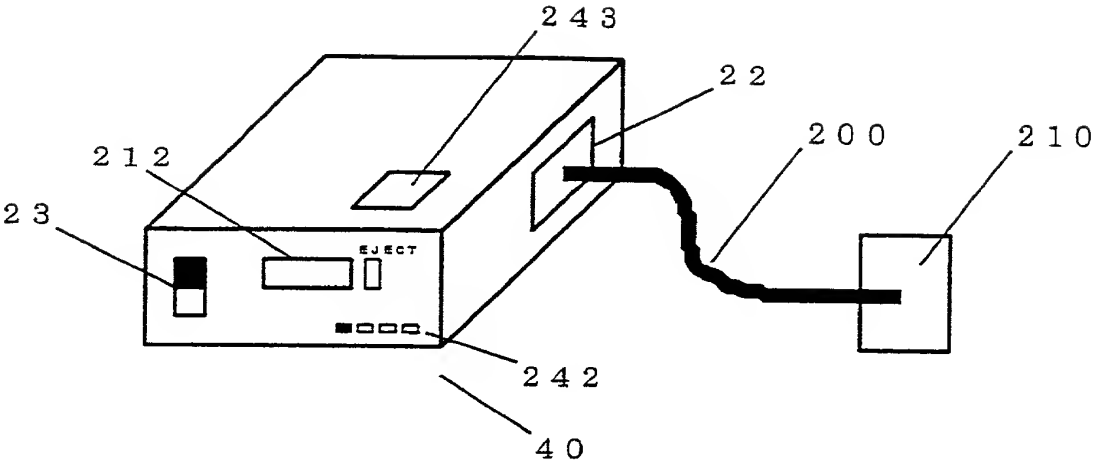


FIG. 21 (b)

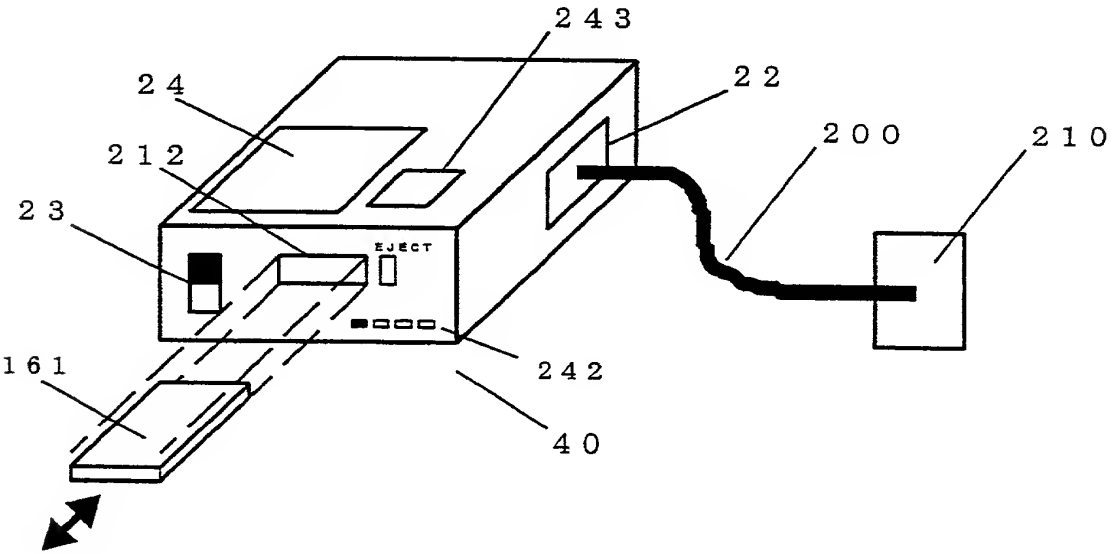


FIG. 22 (a)

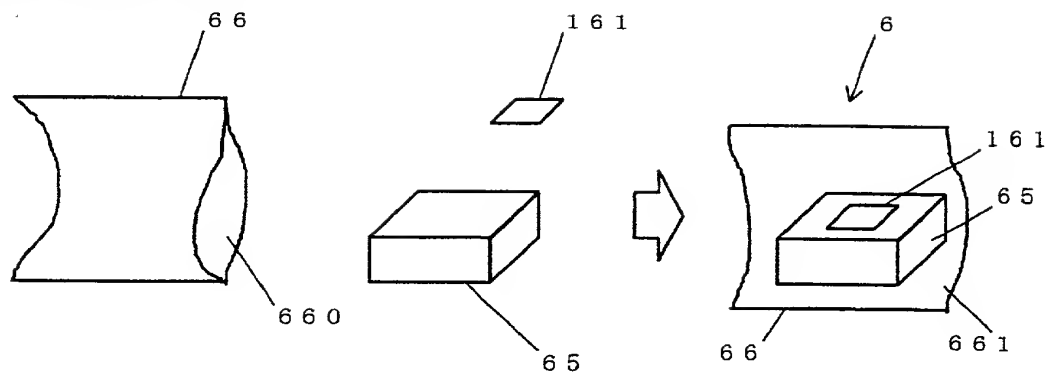


FIG. 22 (b)

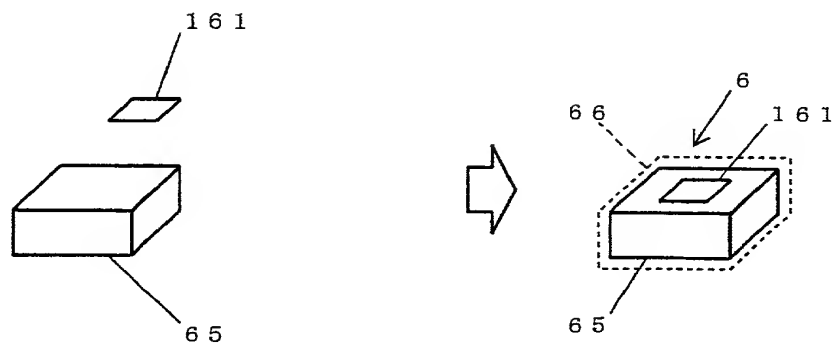
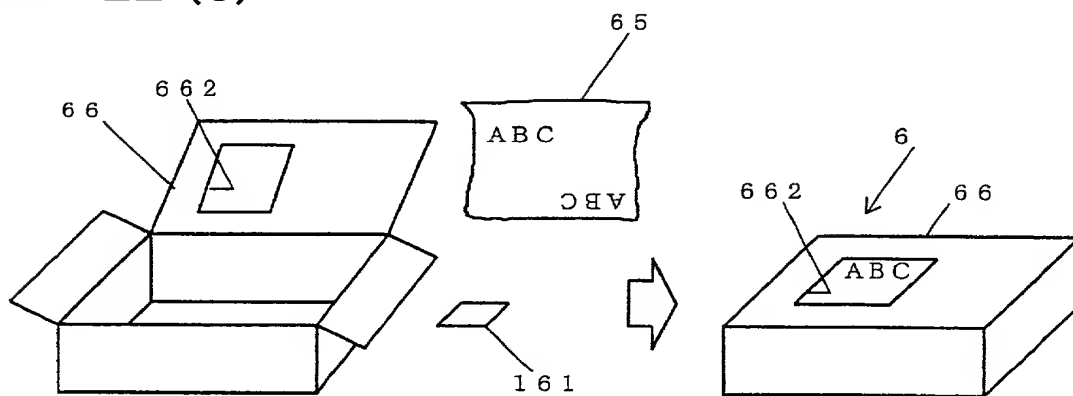


FIG. 22 (c)



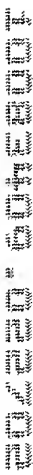
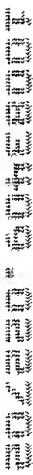
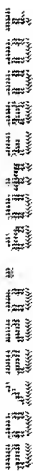
[illegible][illegible][illegible]

FIG. 24 (a)

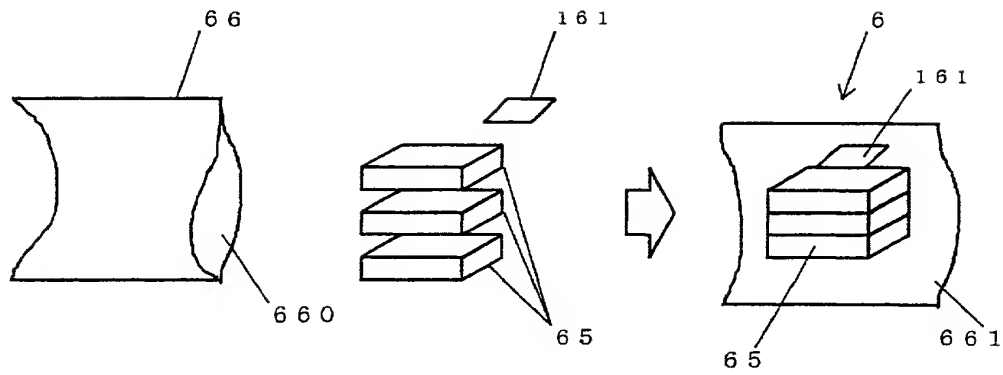


FIG. 24 (b)

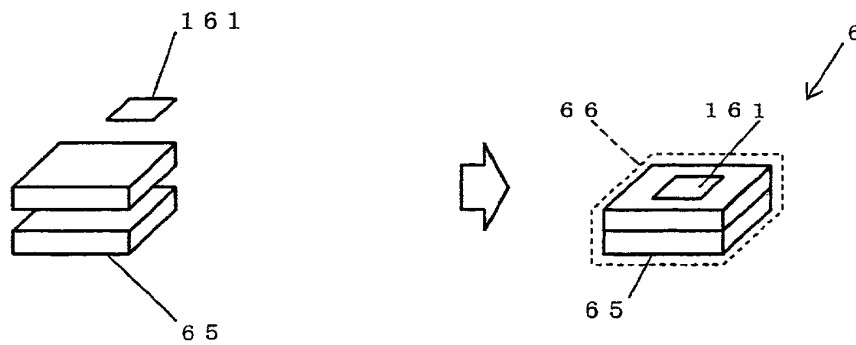


FIG. 24 (c)

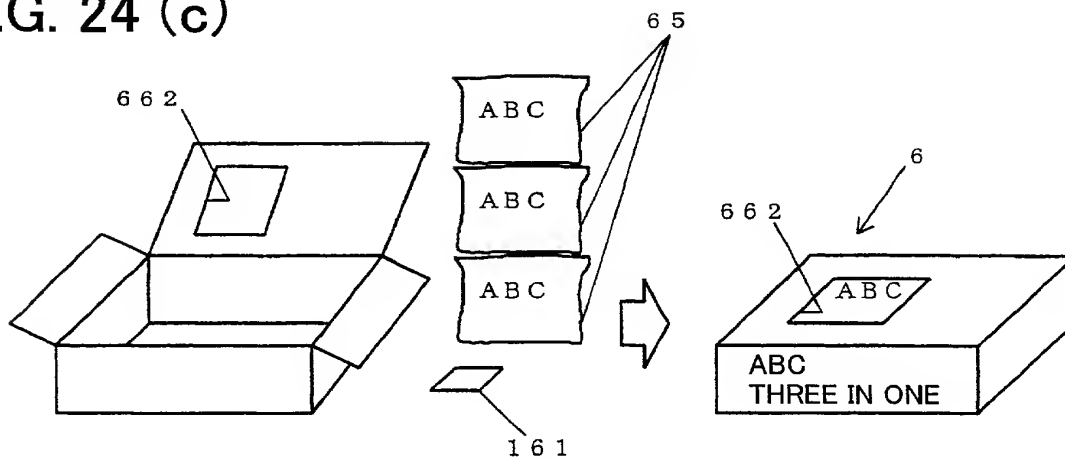


FIG. 25 (a)

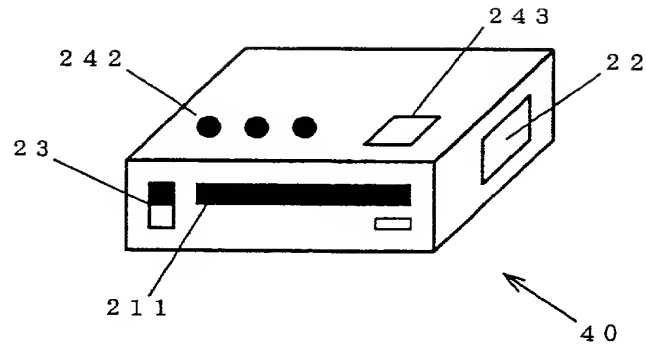


FIG. 25 (b)

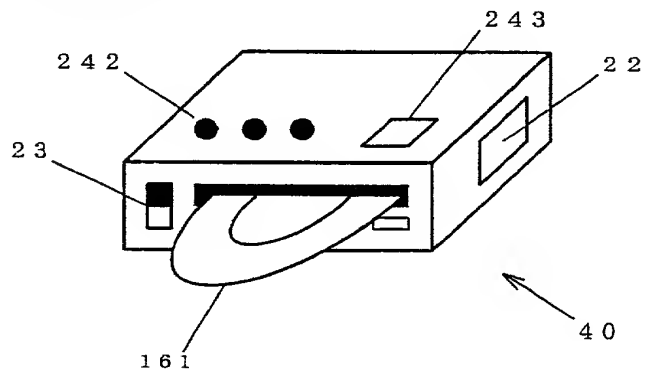


FIG. 25 (c)

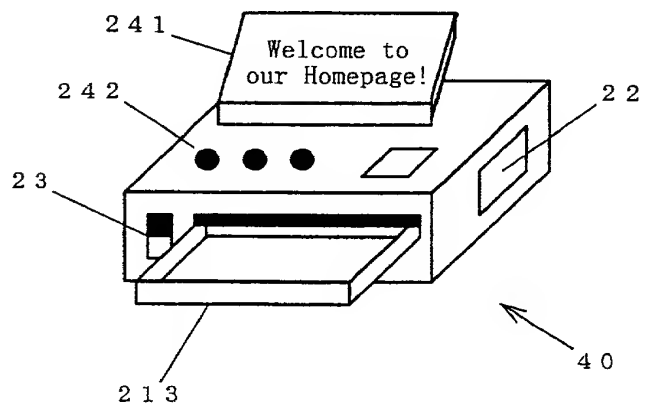


FIG. 26

TERMINAL STATION TABLE

TERMINAL STATION ID	CONTRACT SIGNER ID
000001	000001
000002	216320
000003	002560
000004	380905
000005	102611
.	
.	
.	
.	

CUSTOMER TABLE

CONTRACT SIGNER ID	NAME	REMARKS
000001	△△ △△	PRIVATE
000002	▲▲▲▲ ▲	PRIVATE
000003	○ ○○	CORPORATE
000004	□□ □□□	PRIVATE
000005		
.		
.		
.		
.		

20220320 16:30:00

CONTRACT SIGNER ID : 000125

[illegible]

FIG.32

ACCOUNTING LIST[4] (PERIOD: FEBRUARY 16, 2000 – MARCH 15, 2000)

CONTRACT SIGNER ID:000125
CONTRACT MODEL:GENERAL MACHINE

No.	PRODUCT	ACCOUNT FACTOR	DATE OF INSTALLATION	QUANTITY	UNIT PRICE	SUBTOTAL
1	APPLICATION SOFTWARE "Datahunter"	k1	3/10/2000	1	p1'	p1' * k1
2						
3						
4						
5						
TOTAL						ΔΔΔΔ. Δ

ACCOUNTING LIST[5] (PERIOD: MARCH 16, 2000 –APRIL 15, 2000)

CONTRACT SIGNER ID:000125
CONTRACT MODEL:

No.	PRODUCT	ACCOUNT FACTOR	DATE OF INSTALLATION	QUANTITY	UNIT PRICE	SUBTOTAL
1	DV CASSETTE	k2	3/18/2000	1	p4'	p4' * k2
2						
3						
4						
5						
TOTAL						

FIG. 33

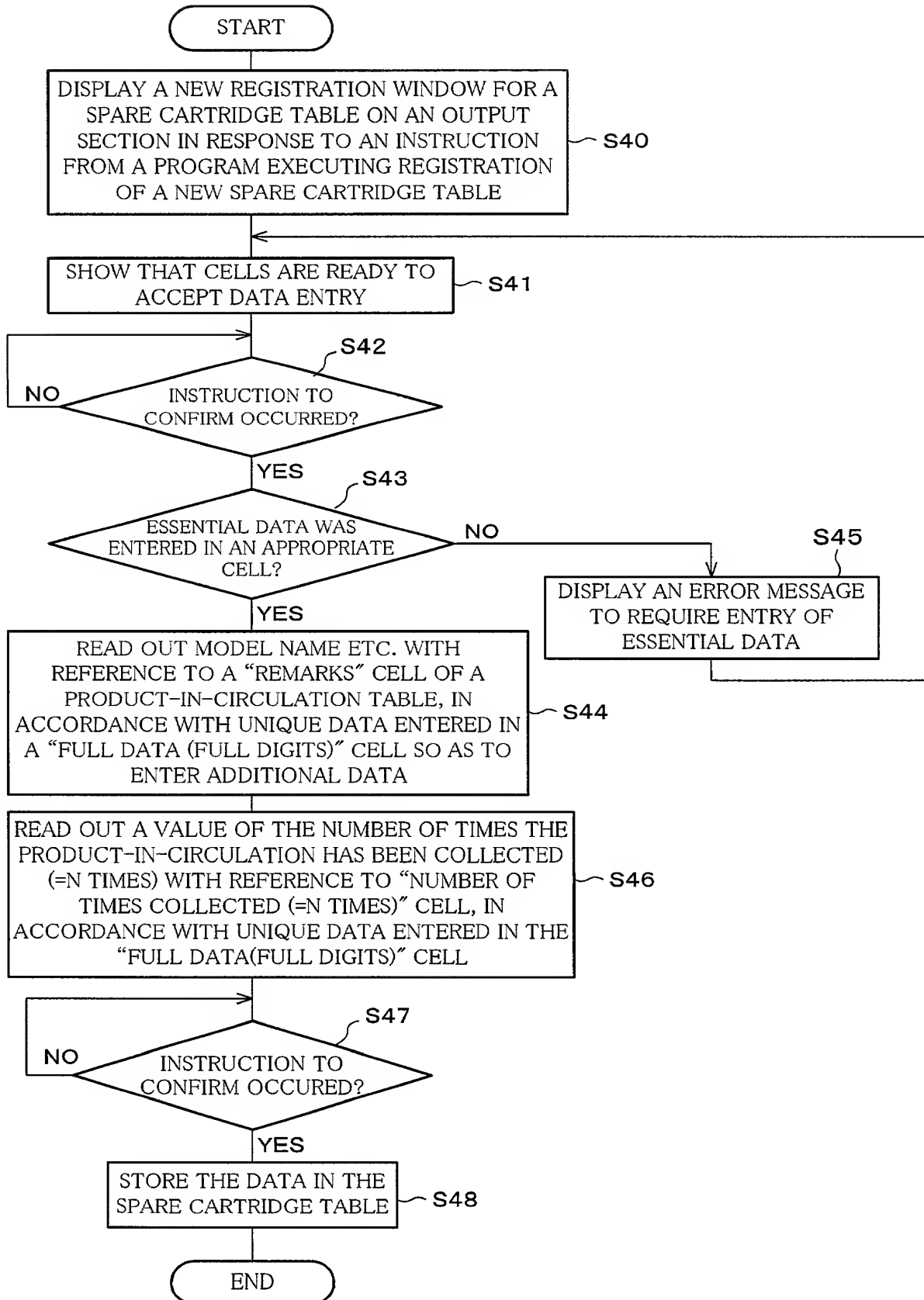


FIG. 34

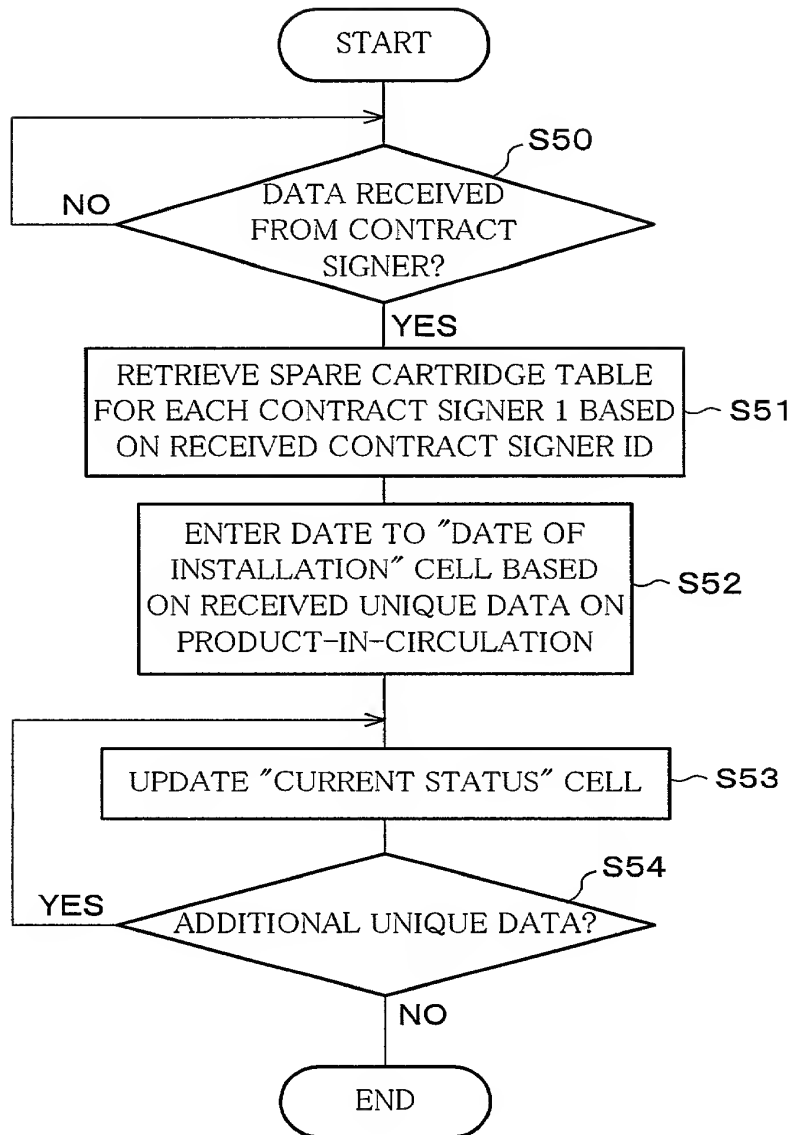


FIG. 35

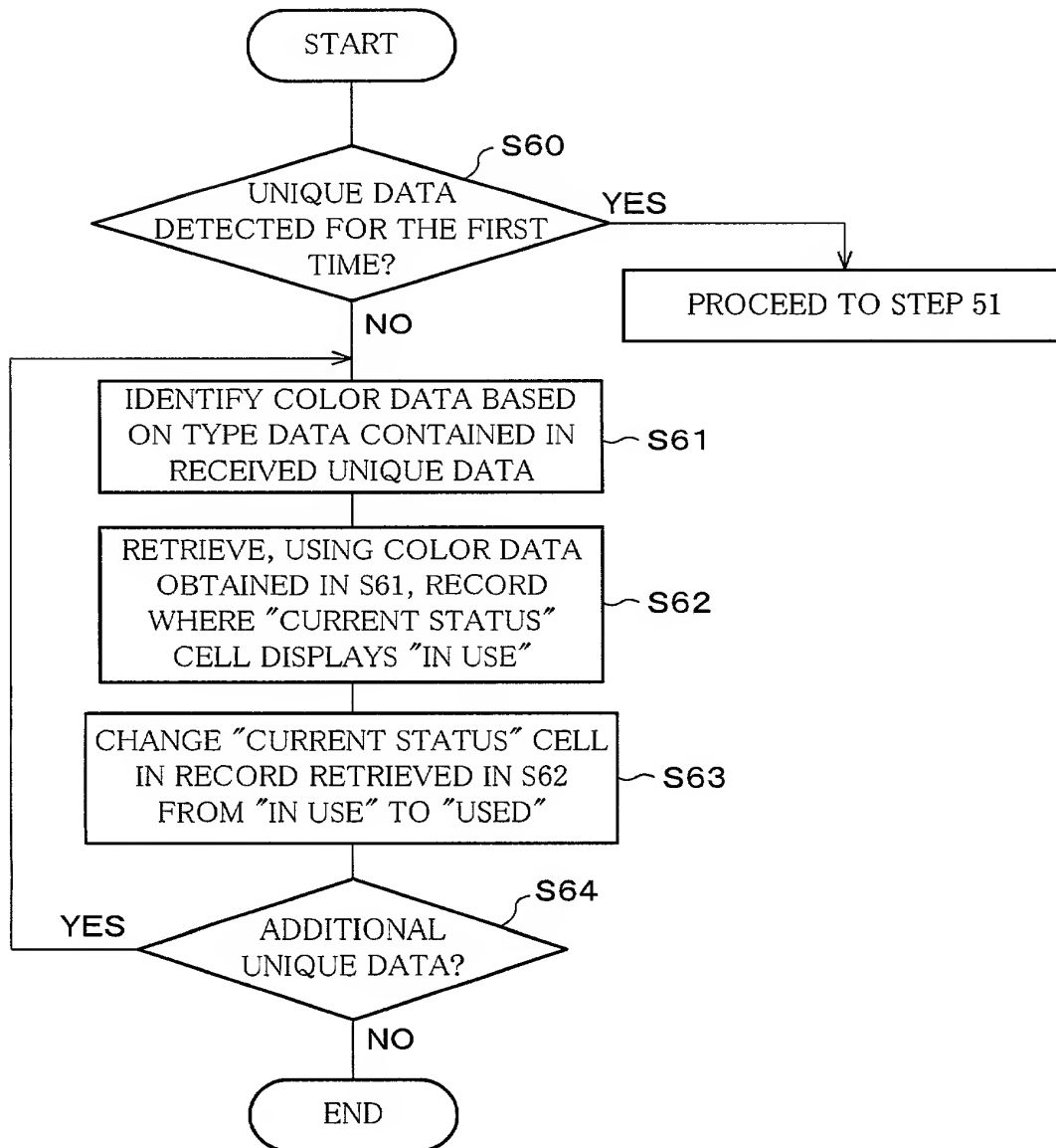


FIG. 36

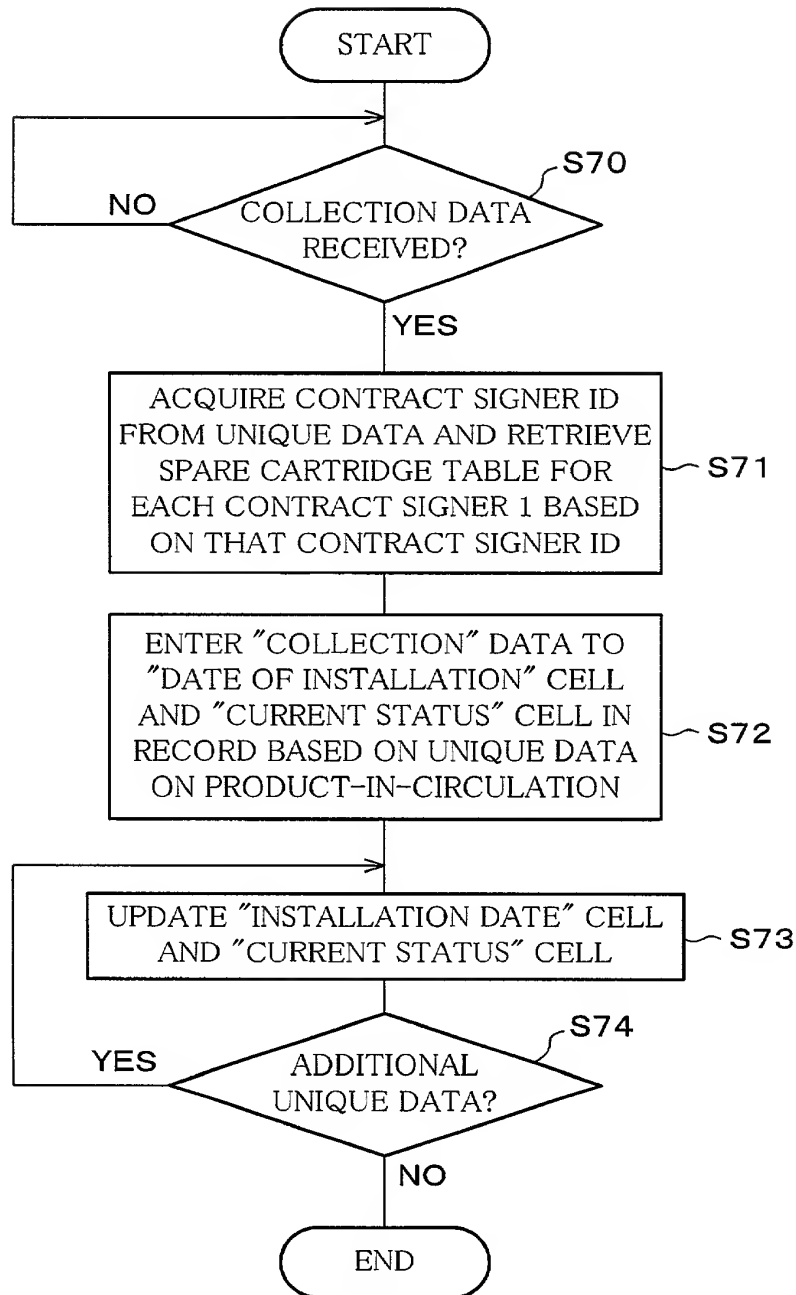
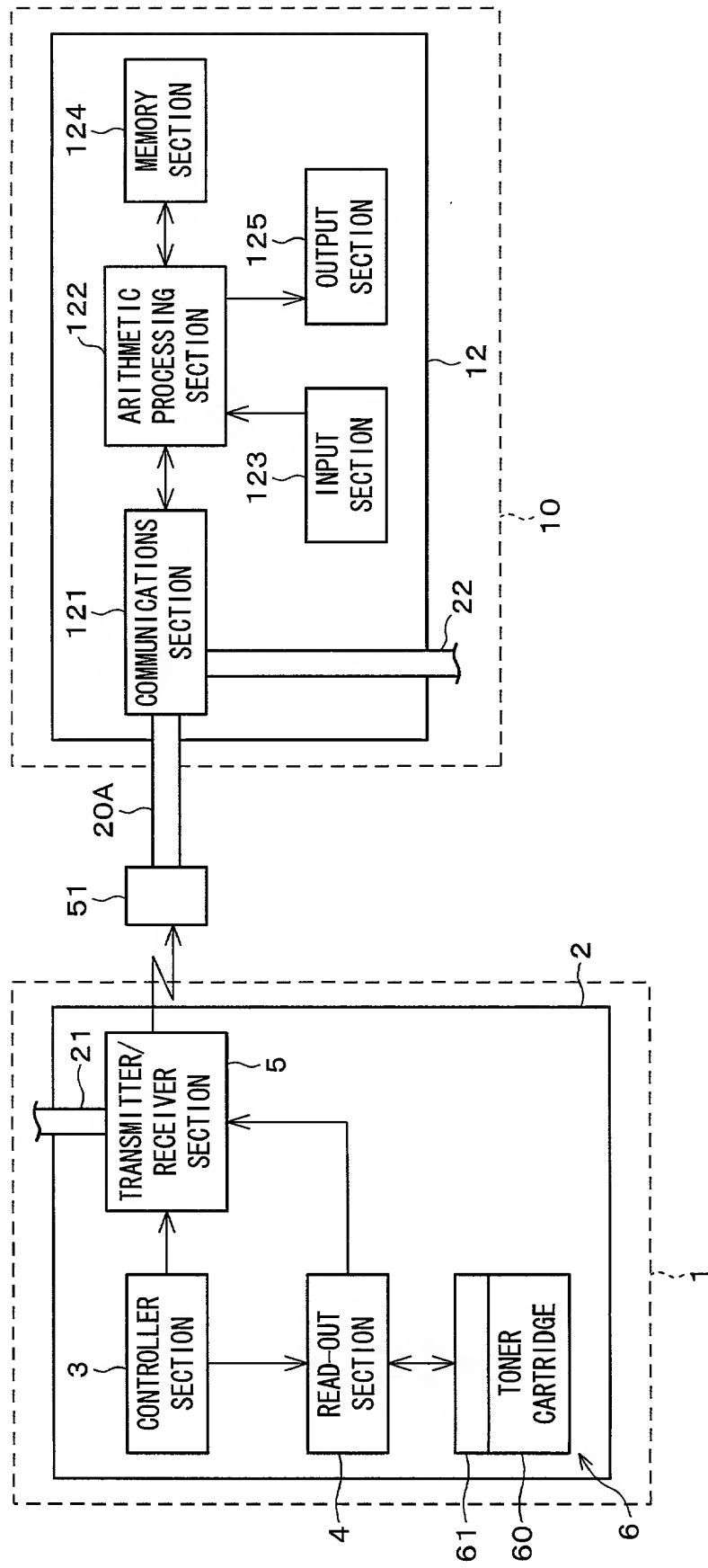


FIG. 37



REMOVAL

INSTALLATION

FIG. 38 (a)

FIG. 38 (b)

FIG. 38 (c)

FIG. 38 (d)

FIG. 38 (e)

FIG. 38 (f)

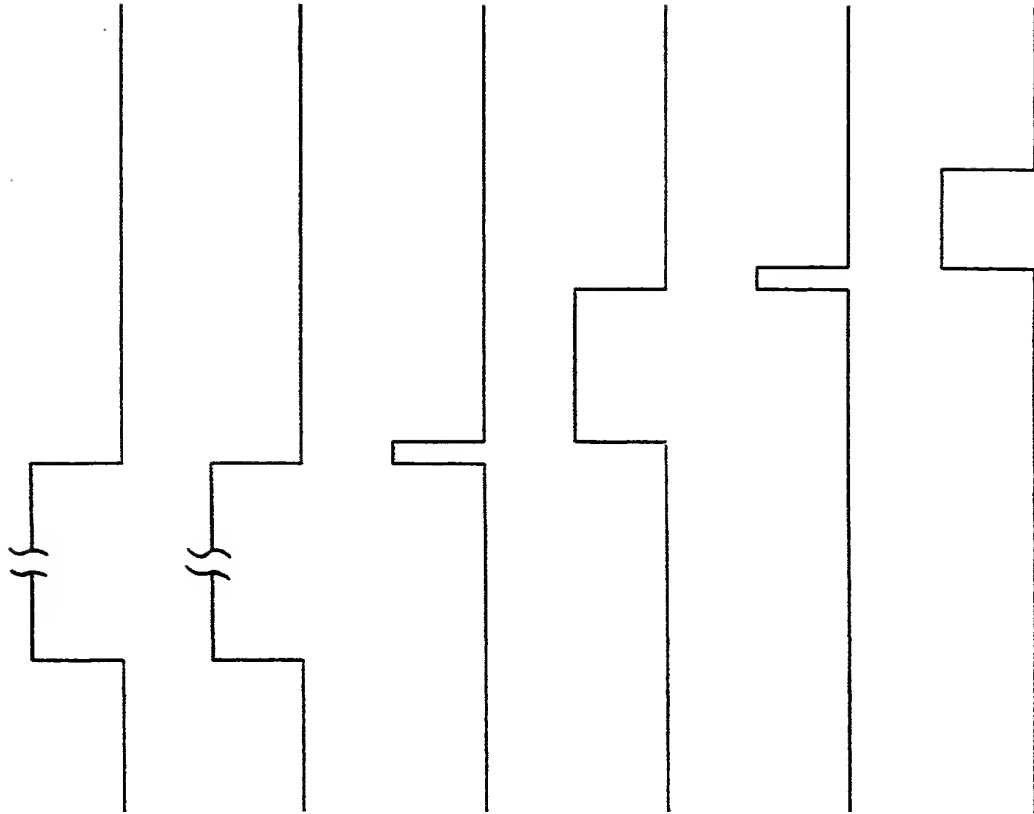
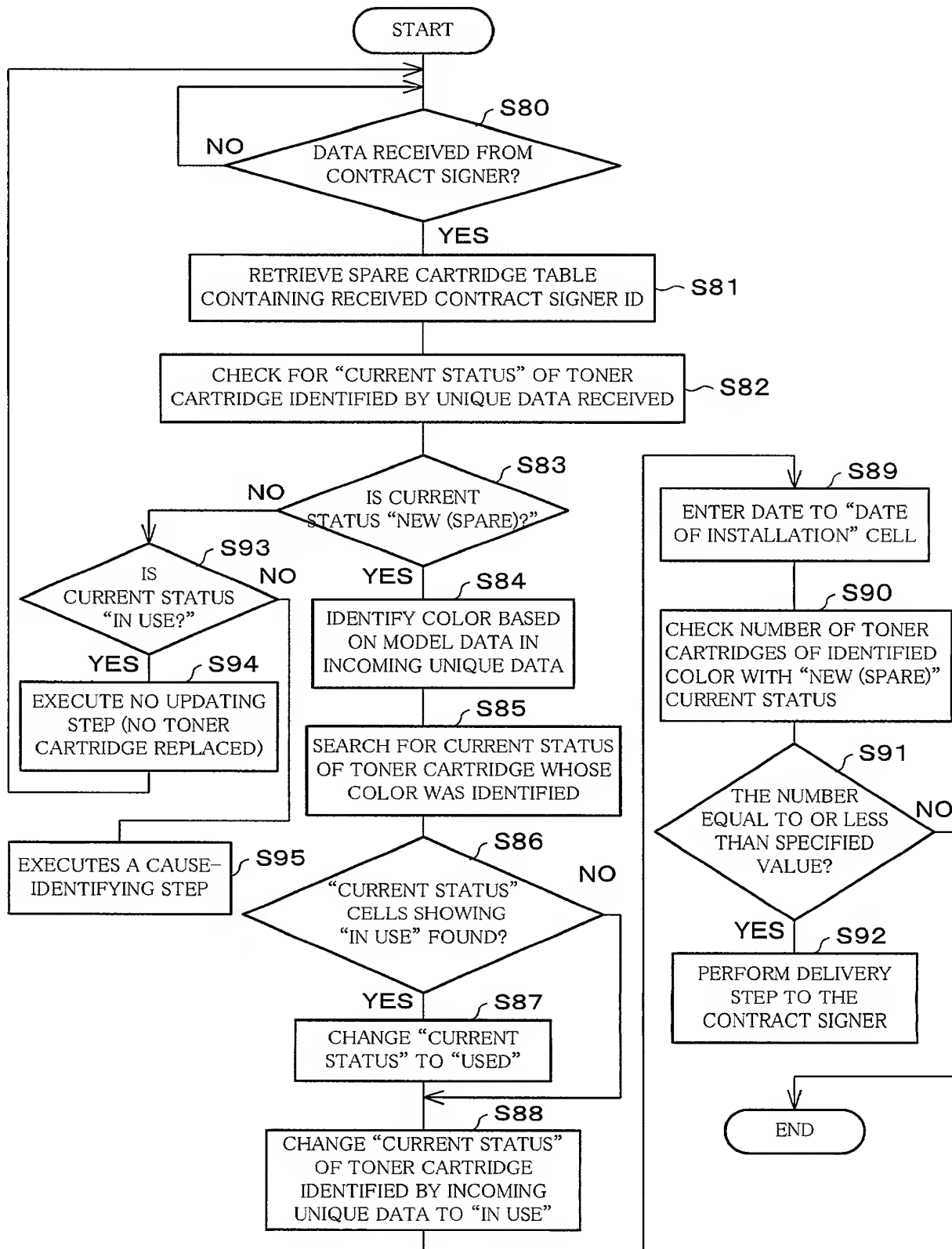


FIG. 39



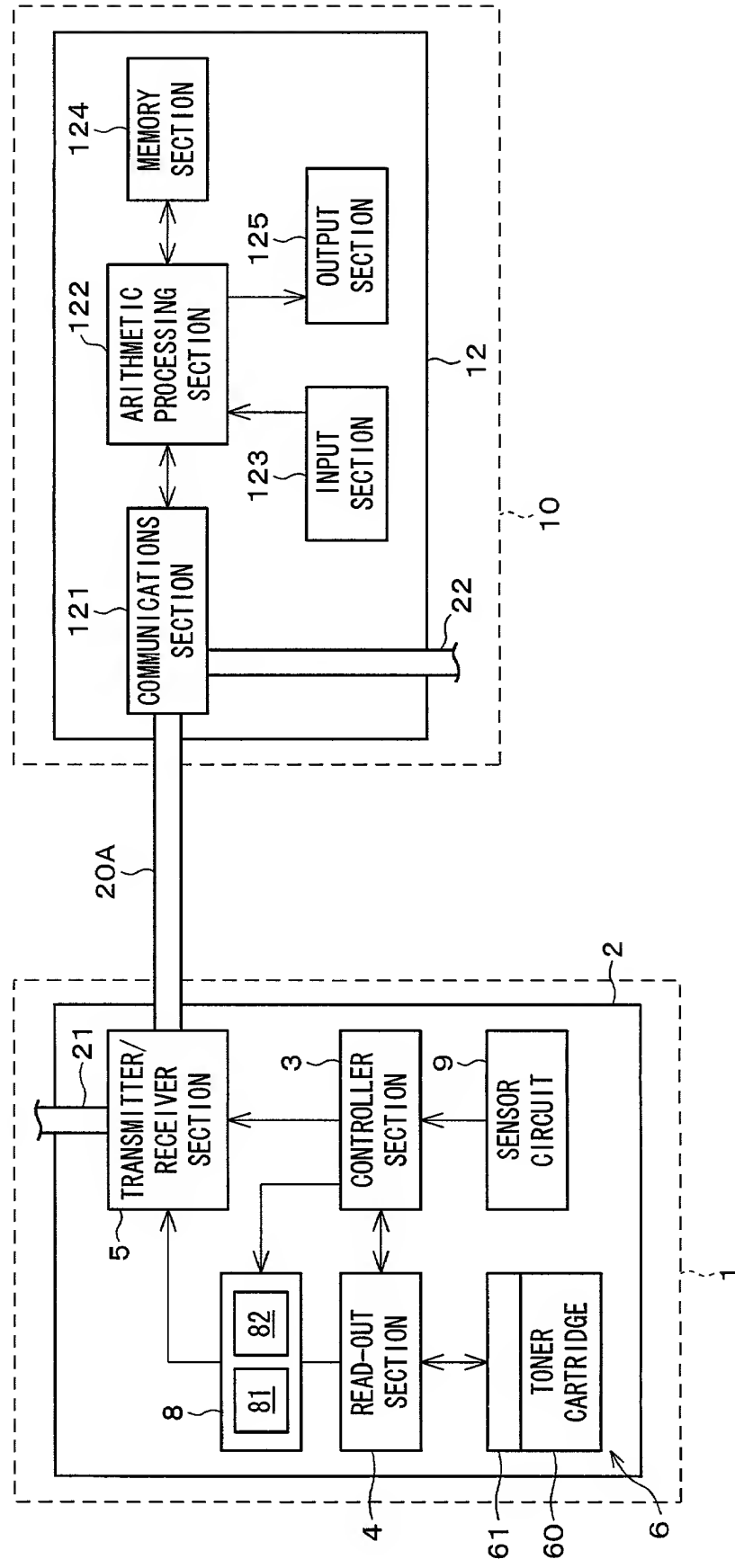
[illegible]

FIG. 41 (a)

ADVANCE REQUEST PAGE

ENTER YOUR CONTRACT SIGNER ID

SELECT ONE OR MORE PRODUCT GROUPS THAT YOU WISH TO BE DELIVERED IN ADVANCE.

☒ •OFFICE SUPPLIES

☒ •ENTERTAINMENT PRODUCTS

☐ •EVERYDAY COMMODITIES

.....

FIG. 41 (b)

ADVANCE REQUEST PAGE

SELECT ONE OR MORE PRODUCTS THAT YOU WISH TO BE DELIVERED IN ADVANCE.

☒ •SOFTWARE FOR PC

☒ •WESTERN MOVIES (ON DVD)

☐ •JAPANESE MOVIES (ON DVD)

.....

FIG. 41 (c)

.....

<FORM ACTION="...">

<INPUT TYPE="checkbox" NAME="0210">•SOFTWARE FOR PC

<INPUT TYPE="checkbox" NAME="0220">•WESTERN MOVIES (ON DVD)

<INPUT TYPE="checkbox" NAME="0230">•JAPANESE MOVIES (ON DVD)

.....

</FORM>

.....

FIG. 41 (d)

DATA	NUMBER OF REPLIES
0210	84
0220	173
0230	50
...	

FIG. 41 (e)

DATA	ARTICLE NAME
0210	SOFTWARE FOR PC
0220	WESTERN MOVIES (ON DVD)
0230	JAPANESE MOVIES (ON DVD)
...	

FIG. 42 (a)

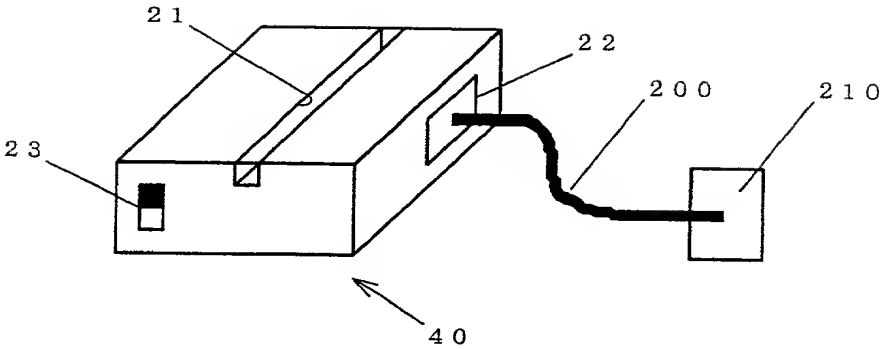


FIG. 42 (b)

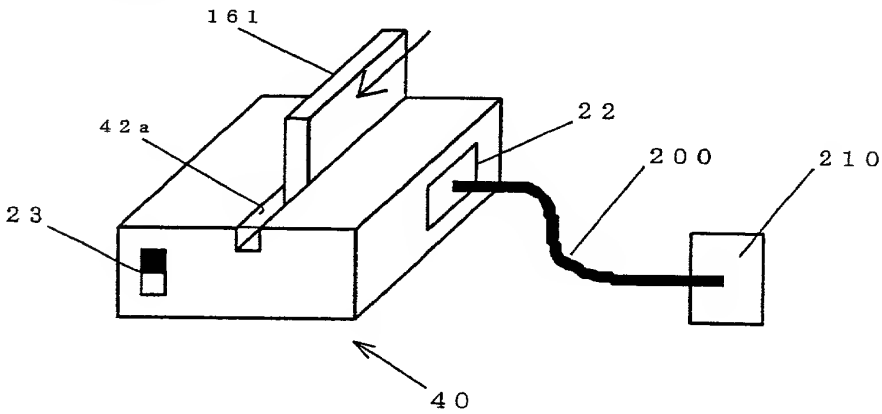


FIG. 42 (c)

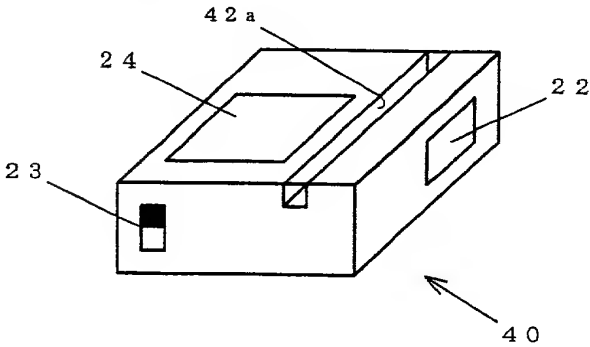


FIG. 43 (a)

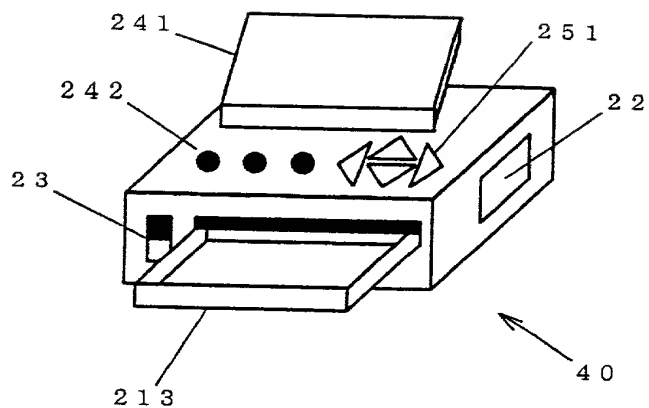


FIG. 43 (b)

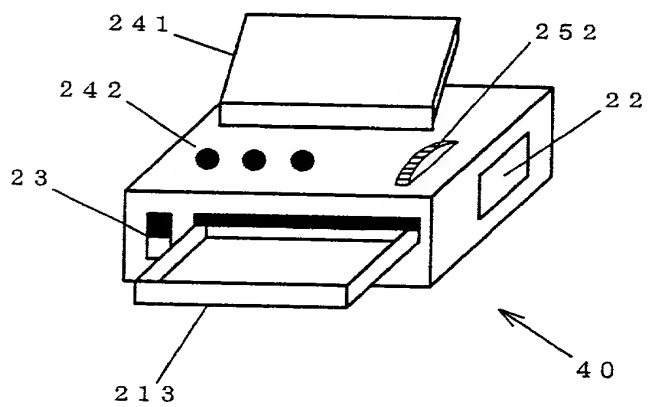
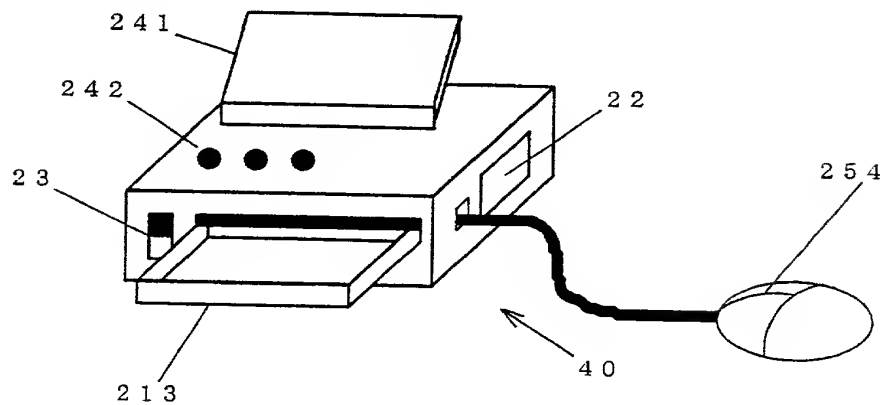


FIG. 43 (c)



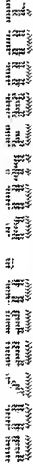
[illegible][illegible][illegible]

FIG.46(a)

PRODUCT-IN-CIRCULATION TABLE [1]

CURRENT DATA AND TIME Tp: 10/28/2000

UNIQUE DATA	REMARKS ON PRODUCT-IN-CIRCULATION TABLE	"USE-BY" DATE T	ACCOUNTING
0000 0000 0000 0101 0000	BLACK TONER CARTRIDGE FOR AR-2000	5/14/2000	CHARGED
0000 0000 0000 0101 0001		5/14/2000	UNCHARGED
0000 0000 0000 0101 0010		5/14/2000	UNCHARGED
...	
0100 0000 0000 0000 0100	YELLOW TONER CARTRIDGE FOR AR-2000	11/1/2001	CHARGED
0100 0000 0000 0000 0101		11/1/2001	UNCHARGED
...	
0100 0000 0000 0000 1100	MAGENTA TONER CARTRIDGE FOR AR-2000	11/1/2001	CHARGED
0100 0000 0000 0000 1101		11/1/2001	UNCHARGED
...	
1100 0000 0000 0000 0111	CYAN TONER CARTRIDGE FOR AR-2000	11/1/2001	CHARGED
1100 0000 0000 0000 1000		11/1/2001	UNCHARGED
...

FIG.46(b)

PRODUCT-IN-CIRCULATION TABLE [2]

CURRENT DATA AND TIME Tp: 10/28/2000

UNIQUE DATA	REMARKS	"USE-BY" DATE T	ACCOUNTING
...
0010 0000 0000 0000 0000	APPLICATION SOFTWARE "DATA SEARCH" Ver. 1.0	12/31/2000	CHARGED
0010 0000 0000 0000 0001			UNCHARGED
0010 0000 0000 0000 0010			UNCHARGED
...			...
0010 0000 0000 1000 0000	APPLICATION SOFTWARE "DATA SEARCH" Ver. 2.0	5/31/2001	CHARGED
0010 0000 0000 1000 0001			CHARGED
0010 0000 0000 1000 0010			UNCHARGED
...			...
...
0010 0001 0000 0000 0000	APPLICATION SOFTWARE "TRANSLATION ASSISTANT"	7/1/2001	CHARGED
0010 0001 0000 0000 0001			CHARGED
0010 0001 0000 0000 0010			UNCHARGED
...

FIG. 48 (a) INSTALLED CARTRIDGE DATA

MACHINE MODEL		AR-2000		LIBRE		CONTRACT SIGNER ID			000125	
CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY Tr	CORRESPONDING SPARE CARTRIDGE No.		
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA					
BLACK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
YELLOW	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
MAGENTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
CYAN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

FIG. 48 (b) SPARE CARTRIDGE DATA

MACHINE MODEL		AR-2000 LIBRE		DATE		03/22/2000/15:58			
CONTRACT SIGNER ID		000125							
No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY Tr
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA			
1	3/22/2000	—	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	NEW (SPARE)	5/14/2000	Tr 3
2	3/22/2000	—	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	NEW (SPARE)	11/1/2001	Tr 1
3	3/22/2000	—	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	NEW (SPARE)	11/1/2001	Tr 1
4	3/22/2000	—	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	NEW (SPARE)	11/1/2001	Tr 1
5	3/22/2000	—	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	NEW (SPARE)	12/14/2000	Tr 1
6	3/22/2000	—	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	NEW (SPARE)	11/1/2001	Tr 1
7	3/22/2000	—	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	NEW (SPARE)	11/1/2001	Tr 1
8	3/22/2000	—	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	NEW (SPARE)	11/1/2001	Tr 1
9	.								
10	.								

FIG. 50 (a) INSTALLED CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE

CONTRACT SIGNER ID 000125

CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY Tr	CORRESPONDING SPARE CARTRIDGE No.
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA			
BLACK	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	12/14/2000	Tr 1	0 (No. 5)
YELLOW	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	11/1/2001	Tr 1	1 (No. 2)
MAGENTA	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	11/1/2001	Tr 1	1 (No. 3)
CYAN	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	11/1/2001	Tr 1	1 (No. 4)
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FIG. 50 (b) SPARE CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE

CONTRACT SIGNER ID 000125

DATE 03/22/2000/15:58

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY Tr
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA			
1	3/22/2000	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	USED	5/14/2000	Tr 3
2	3/22/2000	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	IN USE	11/1/2001	Tr 1
3	3/22/2000	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	IN USE	11/1/2001	Tr 1
4	3/22/2000	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	IN USE	11/1/2001	Tr 1
5	3/22/2000	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	IN USE	12/14/2000	Tr 1
6	3/22/2000	—	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	NEW (SPARE)	11/1/2001	Tr 1
7	3/22/2000	—	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	NEW (SPARE)	11/1/2001	Tr 1
8	3/22/2000	—	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	NEW (SPARE)	11/1/2001	Tr 1
9	.								
10	.								

03/22/2000 15:58

FIG. 51 (a) INSTALLED CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE

CONTRACT SIGNER ID 000125

CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY Tr	CORRESPONDING SPARE CARTRIDGE No.
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA			
BLACK	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER (00)	AR-2000	0000 0000 0101 0001	12/14/2000	Tr 1	1 (No. 5)
YELLOW	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER (01)	AR-2000	0000 0000 0000 0100	11/1/2001	Tr 1	1 (No. 2)
MAGENTA	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER (10)	AR-2000	0000 0000 0000 1100	11/1/2001	Tr 1	1 (No. 3)
CYAN	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER (11)	AR-2000	0000 0000 0000 0111	11/1/2001	Tr 1	1 (No. 4)
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A		N/A

FIG. 51 (b) SPARE CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE

CONTRACT SIGNER ID 000125

DATE 03/22/2000/15:58

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY Tr
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA			
1	3/22/2000	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER (00)	AR-2000	0000 0000 0101 0000	USED	5/14/2000	Tr 3
2	3/22/2000	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER (01)	AR-2000	0000 0000 0000 0100	IN USE	11/1/2001	Tr 1
3	3/22/2000	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER (10)	AR-2000	0000 0000 0000 1100	IN USE	11/1/2001	Tr 1
4	3/22/2000	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER (11)	AR-2000	0000 0000 0000 0111	IN USE	11/1/2001	Tr 1
5	3/22/2000	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER (00)	AR-2000	0000 0000 0101 0001	IN USE	12/14/2000	Tr 1
6	3/22/2000	COLLECTED	0100 0000 0000 0000 0101	YELLOW TONER (01)	AR-2000	0000 0000 0000 0101	COLLECTED	—	—
7	3/22/2000	COLLECTED	1000 0000 0000 0000 1101	MAGENTA TONER (10)	AR-2000	0000 0000 0000 1101	COLLECTED	—	—
8	3/22/2000	COLLECTED	1100 0000 0000 0000 1000	CYAN TONER (11)	AR-2000	0000 0000 0000 1000	COLLECTED	—	—
9	6/20/2000	—	0000 0000 0000 0101 0010	BLACK TONER (00)	AR-2000	0000 0000 0101 0010	NEW (SPARE)	12/14/2000	Tr 2
10	.								

FIG. 52

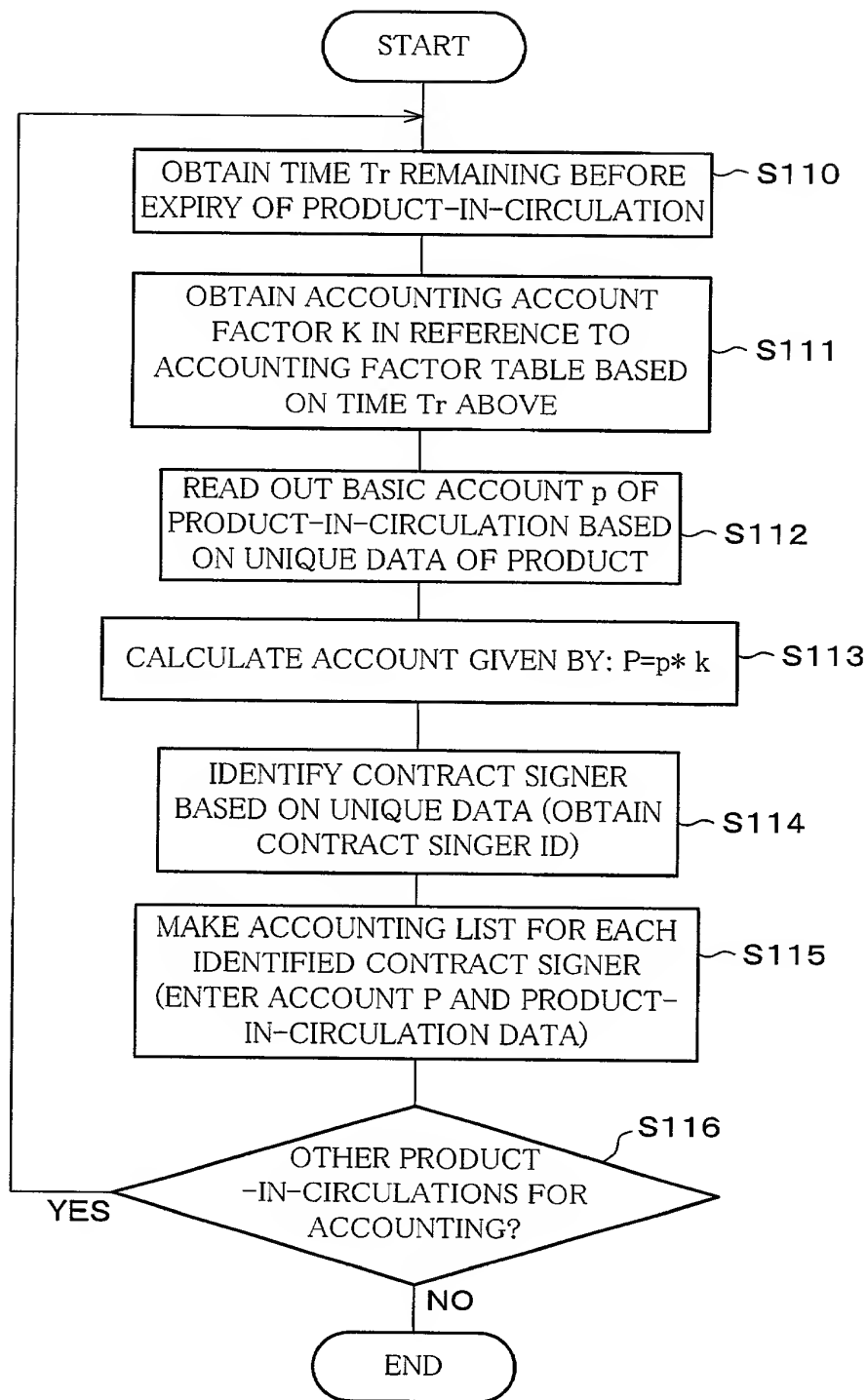


FIG.53

ACCOUNTING FACTOR TABLE [1]

TIME REMAINING BEFORE EXPIRY T_r	ACCOUNTING FACTOR k
Tr0: MORE THAN 1 YEAR	$k_0=1$
Tr1: 6 MONTHS TO 1 YEAR	k_1
Tr2: 2 MONTHS TO 6 MONTHS	k_2
Tr3: 1 MONTH TO 2 MONTHS	k_3
Tr4: LESS THAN 1 MONTH	k_4

NOTE THAT $k_0 > k_1 > k_2 > \dots$

FIG. 54

